



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION
CITY VIEW PLAZA, SUITE 7000
#48 165 RD. KM 1.2
GUAYNABO, PR 00968-8069

JUL 10 2018

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Article Number: 7017 1450 0001 0607 4995

Ms. Irma López
Executive Director
Environmental Compliance, Health, and Occupational Safety
Puerto Rico Aqueduct and Sewer Authority
P.O. Box 7066
San Juan, Puerto Rico 00916-7066

**Re: Compliance Evaluation Inspection
Guanica Wastewater Treatment Plant
NPDES Permit Number PR0020486**

Dear Ms. López:

On June 11, 2018, the United States Environmental Protection Agency (EPA) conducted a Compliance Evaluation Inspection (CEI) at the above referenced Puerto Rico Aqueduct and Sewer Authority's (PRASA) Wastewater Treatment Plant (WWTP) located in Guanica, Puerto Rico. The CEI was conducted pursuant the authority contained in Section 308 of the Clean Water Act, 33 U.S.C. § 1251 et seq., 40 CFR § 122.41(a)(2), & 1,2, 3, and in accordance with Agency wide acceptable guidance and procedures. PRASA was represented by Amalio Quiros, Plant Operator.

Enclosed you will find the inspection report. The CEI report indicates the noncompliance items or deficiencies which should be corrected to ensure compliance with the Clean Water Act and the National Pollutant Discharge Elimination System ("NPDES") Permit. There are also certain areas of concern which are items that could be improved for better operation of the facility. Within ninety (90) calendar days of receipt of this letter, please respond with the actions that PRASA has taken or will take to address the deficiencies included in the attached Water Compliance Inspection Report.

Should you have any questions feel free to contact Miguel A. Batista, Environmental Engineer, at (787) 977-5823.

Sincerely,

Jaime A. Geliga

Chief

Municipal Water Program Branch
Caribbean Environmental Protection Division

Enclosure

cc. Annette Feliberty, EQB (w/Enclosures)
Bruce León, PRASA

NPDES Inspection Report

COMPLIANCE EVALUATION INSPECTION

Facility Name: Guanica WWTP
NPDES Permit Number: PR0020486
Permit Status: Active (02/01/2008 – 01/31/2023)
PRASA representative: Amalio Quirós, Plant Operator
EPA Inspector: Miguel A. Batista, Environmental Engineer

I. BACKGROUND

A Compliance Evaluation Inspection (CEI) was conducted on June 11, 2018 at the Guanica WWTP. The CEI consisted of an opening interview to discuss the purpose of the inspection and to request information about the facility, a site tour to overview operational and maintenance conditions, a document review to assess records compliance, sampling at the Discharge Point 001 (grab sample taken for a few physical/chemical parameters) to determine permit compliance, and a closing interview to discuss preliminary findings.

II. FACILITY DESCRIPTION AND OPERATOR'S LICENCE STATUS

The Guanica WWTP is a secondary treatment plant. The facility consists of two treatment modules. One module is a 0.5 MGD activated sludge conventional package plant (Old Plant), and the second module is a 1.25 MGD Biological Nutrient Removal (BNR) treatment plant (New Plant). The New Plant was in service. The Old Plant was out of service.

At the time of the inspection, Amalio Quiros was acting as Plant Operator for the Guanica WWTP. Mr. Quiros has obtained the certification as a WWTP Operator Level IV, license # 2099, which expires on April 21, 2020.

III. INSPECTION FINDINGS

A. Equipment unit identified in poor operational conditions or not in service at the time of the EPA's CEI (June 11, 2018) are summarized in the following table:

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
1. Motor-Blower # 1 (old plant) (1116116)	04/20/2018	3847	Malfunction.	No.
2. Motor-Blower # 3 (old plant) (208951)	06/09/2017	10469926	Got tripped.	Yes.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
3. Motor-Blower # 2 (old plant) (208952)	06/03/2018	38859	Got tripped.	No.
4. Control Panel PP1 (MDP) (1112479)	04/26/2018	10518970	Working on automatic mode.	No.
5. A/C Lab. Building (1133669)	05/23/2018	38851	Lack of gas.	No.
6. Booster Pump Potable Cl2 (1133665)	01/12/2018	38823	Malfunction.	No.
7. Exhaust Fan Chlorine Room (11124753)	04/25/2018	38849	Malfunction.	No.
8. Pump/Motor NPW # 2 (1120889)	01/23/2017	10481657	Air accumulation.	Yes.
9. Pump/Motor NPW # 1 (1129780)	03/25/2017	10453999	Malfunction.	Yes.
10. NPW Pumps Panel (1114177)	06/03/2018	38860	Malfunction.	No.
11. Pump/Motor Degritter # 1 (208765)	12/18/2017	10330755	Malfunction.	Yes.
12. Pump/Motor Degritter # 2 (208766)	05/29/2017	10455402	Malfunction.	Yes.
13. Conveyor Degritters (209331)	06/29/2017	10471396	Corrosion	Yes.
14. Sum Pump Influent Wet Well Original 2 (1104906)	06/03/2018	38859	Got tripped.	No.
15. Sum Pump Influent Wet Well Original 3 (1105306)	05/26/2018	38856	Malfunction.	No.
16. Sum Pump Influent Wet Well Original 3 (1105304)	05/16/2018	38852	Got tripped.	No.
17. Filter Press (1107285)	05/18/2018	10453012	Oil leak.	No.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
18. Filter Press Control Panel (1115971)	03/16/2017	10457848	Malfunction.	Yes.
	08/25/2017	10484730	Wrong reading.	Yes.
19. BNR Clarifier # 1 (No SAP #)	10/30/2015	10366548	Short-circuit.	Yes.
20. Clarifier # 1 – Arm (209653)	03/04/2017	10368441	Broken rubber.	Yes.
21. Clarifier # 2 (No SAP #)	05/13/2015	10371891	Short-circuit.	Yes.
22. Clarifier # 2 – Arm's Transmission (209654)	03/04/2016	10381900	Broken rubber.	Yes.
23. Influent Flow Meter BNR (1121292)	07/20/2017	10478070	Wrong reading.	Yes.
24. Sum Pump Equalization Tank # 2 (208446)	04/18/2018	38842	Malfunction.	No.
25. Mixer BNR Anaerobic # 2 (1135006)	05/26/2018	38853	Got burned.	No.
26. Blower BNR # 1 (1104338)	12/18/2017	38803	Malfunction.	Yes.
	09/02/2017	10488484	Oil leak.	
27. Blower BNR # 2 (208945)	12/18/2017	38804	Malfunction.	Yes.
	09/02/2018	10450495	Oil leak.	
28. Motor-Blower EQ # 2 (208949)	06/09/2017	10399438	Pulley/oil leak.	Yes.
	12/18/2017	38807	Malfunction.	
29. Pump/Motor Recirculation BNR # 2 (1134626)	05/18/2018	38843	Screws.	No.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
30. Flow meter SLA (old plant) (No SAP #)	05/28/2017	10467265	Failure.	Yes.
31. Drainage valve # 1 (No SAP #)	03/16/2017	10381905	Malfunction.	Yes.
32. Waste Discharge Valve BNR (No SAP #)	05/31/2017	10467839	Adjustment.	Yes.
33. Dry Pit Valve (No SAP #)	07/17/2017	10475366	Malfunction.	Yes.
34. Illumination pole (No SAP #)	07/15/2017	10476238	Improper positioning.	No.
35. Air pipe SLA (No SAP #)	01/26/2017	10440643	Malfunction.	Yes.
36. Chlorine contact chamber # 1 (No SAP #)	08/20/2017	10483297	Adjustment.	Yes.
37. Chlorine contact chamber # 2 (No SAP #)	08/20/2017	10483334	Adjustment.	Yes.
37. Influent Pump # 1 (old plant) (133810)	12/12/2017	38857	Malfunction.	Yes.
38. Blower BNR # 3 (208946)	-----	38805	-----	-----
39. Recirculation Pump BNR # 1 (1134629)	-----	-----	-----	-----

*Check when equipment has been out of service or operating with deficiency for more than 6 months.

B. Other Observations:

1. The hose for influent and effluent auto-samplers was dirty.
2. Corrosion-related issues throughout the facility were observed as in previous inspections.
3. Clarifier # 2: Short circuiting was observed at the "V-type" effluent weirs. Supernatant, some solids and *Nocardia growth* were observed at its surface. Clarifier appeared to be unlevelled, some joints at the "V-type" weirs were also broken.
4. Chlorine Room: It had no power service, due to a damaged transformer. Liquid chlorine was being applied.

C. Documents Review:

1. The NPDES Permit was available, it expires on January 31, 2023.
2. Last documentation available for trainings on HAZWOPER, OSHA, RMP and Chlorine Management/Handling was dated for years 2016 and 2017.
3. The Chain of Custody documentation and the Operator's Log Book were randomly reviewed for year 2018. Documents appeared to be updated.
4. The plant's discharge exceeded the effluent limitation for some parameters from April/2017 until March/2018 as follows:

PARAMETER	DATE
No exceedances.	April/2017
No exceedances.	May/2017
pH.	June/2017
Enterococci Density.	July/2017
Enterococci Density, Copper, Zinc, pH.	August/2017
*	September/2017
*	October/2017
*	November/2017
Enterococci.	December/2017
No exceedances.	January/2018
Sulfide, Total Nitrogen, Cyanide Free.	February/2018
TSS Concentration, Total Nitrogen, Cyanide Free, Residual Chlorine.	March/2018

* On September 5 and 18, 2017, PRASA submitted notification of Force Majeure due to the possible impacts of Hurricanes Irma and Maria. After conversations with PRASA, understanding the effect of such Hurricanes, EPA decided to grant PRASA a waiver for the submission of DMRs for the months of September, October and November, 2017. PRASA was required to restart the submission of DMRs for all its permitted facilities starting in January, 2018 with the sampling results from December, 2017; as established in each NPDES permit.

V. SAMPLING

The effluent sample was evaluated at the discharge point (Point 001) for the parameters shown below at the time of the inspection:

Effluent Grab Sample Results	
Color	No.
Grease	No.
Oil Sheen	No.
Foam	No.
Floatable Solids	00.0 mL/L
Turbidity	2.30 NTU
Residual Chlorine	0.10 mg/L
Temperature	29.0 °C
Dissolved Oxygen	7.48 mg/L
pH	7.65 S.U.

VI. EFFLUENT QUALITY

The appearance of the effluent was clear.

VII. CONCLUSION

The inspection revealed that several process units were out of service or under repair. Please note that **Part 5 of Attachment B: Standard Conditions** of the permit requires the permittee to properly operate and maintain all facilities and systems for collection and treatment (and related appurtenances) which are installed or used to achieve compliance. The sample taken during the inspection was in compliance with the permit's daily limitation parameters for pH, Temperature, Residual Chlorine, and Dissolved Oxygen.

PRASA must submit a compliance plan in order to correct the deficiencies noted above on Section IV.


INSPECTOR SIGNATURE

7-10-18
DATE


SUPERVISOR SIGNATURE

7-10-18
DATE